Welcome to York Soaring Association. This document has been prepared to assist in the transition of WSPA seminar participants at YSA who have been trained by other gliding associations. By reading about our procedures you will be better prepared to ask questions during your initial check flights and demonstrate your ability to meet the requirements for solo privileges in YSA aircraft. Participants who have brought their own glider to the seminar must successfully complete a dual check flight for field orientation prior to being given solo privileges.

While having a valid license legally entitles a glider pilot to fly all types of gliders and take passengers etc., individual SAC clubs require members to meet additional requirements to fly their club aircraft solo, take passengers, or transition to various types of gliders available. These requirements are typically a combination of demonstrated proficiency, knowledge and compliance with club rules and procedures and total solo time accumulated. Once solo privileges in YSA aircraft have been obtained, newly licensed pilots may still be restricted from flying club aircraft in high wind conditions or require additional check flights on specific runways that they have not flown on before. If you have any additional questions please do not hesitate to ask a YSA instructor or CFI, or WSPA co-ordinator.

Prior to being signed off for solo privileges, the pilot must be able to communicate and demonstrate the following pre-flight, pre-maneuver and pre-landing checks. The acronyms for the CISTRSCO, CALL, and SWAFTS checks are not posted in the gliders so you will have to memorize them and verbally demonstrate them on any check flight.

Pre Takeoff Pre-Landing Maneuvers Controls Cockpit (straps, canopy, objects) **S**traps Instruments Wheel, Water and Wind **A**ltitude **S**traps Approach speed Location Trim **F**laps Look out **T**raffic Release/Radio **S**poilers **S**poilers Canopy **O**ptions

If you have alternate checks for pre take of, pre landing, or pre maneuvers, please discuss them with your instructor prior to the flight if you wish to use the checks ou are use to (provided they cover off the same basic items).

At York, the spoilers are typically kept open while a glider pilot is conducting their checks and during hook-up. The spoilers are only closed and locked prior to closing and locking the canopy when the pilot is ready for take off. This is because the individual running the wing and conducting the hook up is generally the same person. Ballast is not one of the pre take off checks but should be checked for prior to entering the glider.

Weights for pilots requiring ballast (generally pilots under 150 lbs) can be found at the rear of the blue shed (Stan's Cottage). Options, such as circuit direction, cross wind correction, field selection in the event of a rope break, definition of upwind, etc. should be discussed once the initial checks are complete. The final Spoilers and Canopy check may be repeated just prior to take-off, which is why the acronym is sometimes written as CISTRSCO-(SC).

For pilots used to the ASCOTT (Altitude, Straps, Canopy, Objects, Traffic, Terrain), these are the same components as the CALL check but in a different order. Cockpit includes the same canopy, straps and loose objects checks; minimum Altitudes still apply for initiating maneuvers (i.e. 1500' AGL for stalls); Location is the same as terrain (no maneuvers over built up areas or the airfield); and Lookout is the same as Traffic (do an "S" turn to check for traffic). Please learn and practice using the CALL check prior to your check flights and be prepared to demonstrate it during your check flight.

For pilots who have been trained to use SWARTSC (Spoilers, Wind, Airspeed, Radio, Trim/Traffic, Straps, Canopy) as a pre-landing check, there are a few notable differences with the SWAFTS check. In addition to wind direction and speed, W signifies the lowering of the wheel and emptying of water ballast (which is common in more advanced gliders that you may one day transition to). The pilot should verbally communicate during their checks that the wheel is down, no water, and direction and speed of the wind. Although the wheel and water elements do not apply to some gliders like the 2-33, it is important to start incorporating these items for when you fly other glider types later on. The decision to set minimum approach speed is then made using the equation **1.5 times the stall speed plus 1/3 the wind speed**. The pilot should calculate this speed, set it, and trim accordingly. For example, in a 15 mph headwind in a glider with stall speed 34 the minimum approach speed would be  $34 \times 1.5 = 51$  plus 15/3 = 5 or 56 mph. In gliders with flaps, the approach speed will also dictate what level of flaps is allowable for landing.

YSA is officially a "no radio" operation so radio is not part of the pre-takeoff checks or part of the pre-landing checks; however, if you are flying a glider that is radio equipped they could be incorporated with the release and traffic sections. A sample radio transmission on downwind could be "Arthur East traffic, this is glider Quebec Papa Romeo, left downwind, runway 32, Arthur East".

Launch procedures. Once the PIC has completed their CISTRSC checks they will indicate to the wing runner how high they will be going to and if they require anything special on the tow. The wing runner will get the tow rope, inspect it to ensure there is only 1 knot, remove any new knots that may have formed, and present the rope to the PIC for approval. The PIC will ensure the proper tow hook is in place, the condition of the hope is good, and then communicate ready to hook up to the wing runner. When the glider is hooked up and the runner is at the wing the PIC will ask their wing runner, "All clear above and behind?" The wing runner will scan the circuit for traffic to avoid launching if another plane landing might interfere with the launch. The wing runner is responsible for determining if it is safe to launch the glider and only yells all clear if they believe it is safe to do so. If the wing runner communicates that all is clear above and

behind the PIC will give the thumb up ready for take off signal. The commands for take up slack and all out are controlled automatically by the wing runner. If the pilot notices anything during the launch that may require the launch to be stopped they should attempt to communicate this to the wing runner and also disconnect the rope if required. If the wing runner notices that something is wrong they should not lift the wing or they should put the wing back on the ground and give the stop signal to the tow plane.

At an altitude of 300' AGL the PIC should verbally note, "All clear 300". Above this height a 180 degree turn is possible in the event of a rope break for all gliders at York Soaring. Prior to 300', the pilot should plan to land ahead or on an angle.

In some gliding operations the tow plane signals the glider to release on every flight at a pre-determined altitude. At YSA, the glider will release at the altitude specified on their flight card prior to the flight without waiting for a tow plane signal. Typically a low tow release is at 1250' AGL, a regular tow 2000' AGL or a high tow at 1000' increments above 2000'. Failure to release prior to or at the predetermined altitude will result in the pilot being charged for extra altitude, spoken to and possibly grounded for the day or multiple days. A full hard release is performed followed by an immediate turn to the right. It is not necessary to assume a high tow position and lower the nose prior to releasing. If the tow plane does waggle its wings at any point the glider pilot should release immediately (as per standard emergency procedures). The field elevation at YSA is 1550' MSL and is written above the altimeter on all aircraft.

The tow plane will typically plan the tow such that the glider will reach release height upwind to the field. Pilots flying the 2-33 and 1-26 are required to stay upwind of the airfield at all times. New pilots sometimes forget that upwind has a north/south component as well as an east/west component. You will be shown on a map and during your check flights where up wind is for different circumstances and also what too far upwind might be depending on your height. All solo flights conducted by pilots who have not obtained their bronze badge should be conducted upwind.

At YSA the circuit is dictated by the wind direction. If on takeoff there is a crosswind from the left, there will be a right hand circuit for gliders such that the base leg is always flown into wind. Power traffic will fly circuits in the opposite direction to gliders. If the wind direction changes during the flight the direction that the circuit is being flown may also change so it is the pilot's responsibility to stay aware of the wind direction and circuit pattern during their flight. There is typically a sign indicating circuit direction in front of Stan's Cottage. Pilot decision making and the ability for the pilot to plan their flight with successful entrance to the correct circuit at appropriate height is an item that must be demonstrated prior to obtaining solo privileges in club aircraft.

During landing, some clubs teach pilots to add 100' to the base and final turn altitudes for every 10 knots of headwind. This is one approach to circuit planning. You will find that at YSA, other options, such as keeping your downwind and base leg closer to the runway can also be used so that the turn onto final is still made between 300-400' AGL in high winds.

At YSA, takeoff and staging is typically conducted on the hanger side of the runway and landing on the far side of the runway. Due to the large number of gliders that may be landing at any time, it is important that gliders clear the runway as soon as possible after landing. The PIC should immediately exit and rotate the glider so that it can be pushed out of the way or transported to the taxiway. When waiting for help to move the glider, spoilers should be open and the canopy closed. When moving gliders across runways go straight across (not diagonal) and then move around on the taxiway. When a pilot is not in the air, it is important to help with the ground handling of other gliders with priority going to gliders that have just landed.

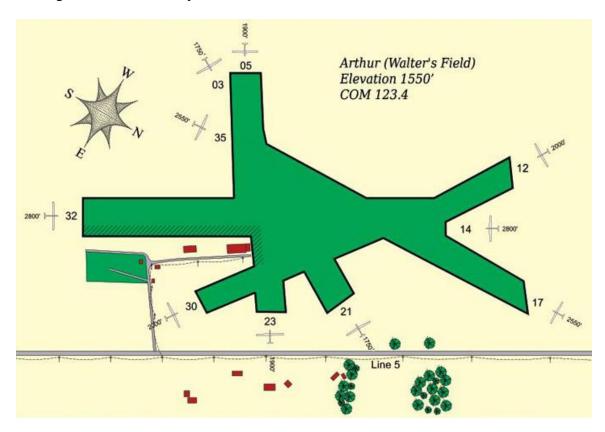
Aircraft waiting to take off on the runway should have the wing adjacent to tow plane traffic down. When gliders are parked on the taxi way, the spoilers should be open with the into-wind wing down and a carpet and tire should be placed on the downward wing. The purpose of the carpet is to keep the wing clean. Each day the last pilot to fly the aircraft must wash down the leading edges of the wings to remove dead bugs, etc. You will help wash the gliders you will be flying every day.

At York you will be able to do extensive thermalling including thermalling with multiple gliders in the same thermal. When joining another glider in a thermal, **you must always turn in the same direction of the other gliders.** You must keep the other gliders in sight and attempt to space yourself in a good position to view the other gliders. If, when two gliders are in a thermal, one should be at 12 o'clock when the other is at 6 o'clock. When three gliders are in a thermal, when one glider is at 12 o'clock the next should be at 4 o'clock and the other at 8 o'clock. If any other glider gets too close to you in the thermal, is thermalling in the wrong direction, or making you uncomfortable in any way, exit the thermal and find another one. Lastly, **all thermalling must occur above 1000'** and should never be initiated at the entrance to the circuit, nor during any leg of the circuit. Prior to obtaining their bronze badge, pilots should select thermals that will keep them upwind of the airfield. If the wind is blowing the thermal downwind the pilot shall exit the thermal, fly upwind, and join another thermal upwind.

To the south west of YSA is a hang glider operation called SOGA. YSA and SOGA have an agreement which includes not flying over their field below 2000' AGL and near their circuit below 1500' AGL. The field will be pointed out to you on check flights if runway 14 is in use. Please know where it is and do not violate the minimum height requirements. The equivalent to York's "practice area" is upwind (north of Hwy 109 in the red areas when taking off from runway 32 and in the green areas when taking off on runway 14). When flying on runway 32, pilots should not venture north of the 2<sup>nd</sup> line unless they have climbed several thousand feet. Similarly, pilots flying on runway 14 should not fly south of side road 20. Examples of "up wind" are included in Appendix A. Please review and understand upwind to avoid unnecessary land outs.

When coming in to land, we would like all pilots to have their stopping point in the intersection of the main runways (32/14, 23/05). Do not land short on the active runway as this forces other gliders to land even shorter or have to fly over you. In some clubs,

gliders must always land short of the tow plane and glider taking off. This is not the case at YSA, where there are over 10 gliders per tow plane and runways wide enough to take off on one side of the runway and land safely on the other. When looking for traffic as part of your downwind, you should be noting traffic on the runway, traffic ahead of you in the circuit, traffic behind you in the circuit, and traffic in the power circuit. If you find yourself too low or if traffic is very congested, it is safe to pick an alternate runway and land there. For example, when runway 32 is in use, landing on runway 30 when doing a right hand circuit is quite common. If landing on an alternate runway, please have your stopping point short of the intersection so you do not interfere with traffic taking off or landing on the main runway.



York is a volunteer organization with no paid employees. WSPA seminar participants are required to assist in flight line duties such as launching and retrieving gliders, packing and unpacking the hangers, and washing/waxing gliders. All fiberglass gliders are to have their wings washed after the last flight of the day by the last pilot who flew the aircraft. Since there is no launch control officer at York, the wing runner is responsible for checking the circuit for traffic and giving the PIC the "all clear above and behind" authorization to launch. The wing runner should do the following checks before launching a glider: T2 C2 S2

T2: Tail dolly off, Tow rope inspected, new knots removed, and rope attached

C2 : Canopy(s) closed and secured, Circuits clear (360° scan and above)

S2: Spoilers closed and locked, Signal from PIC to level wings and initiate launch

If the wing runner notices anything wrong them must inform the PIC.

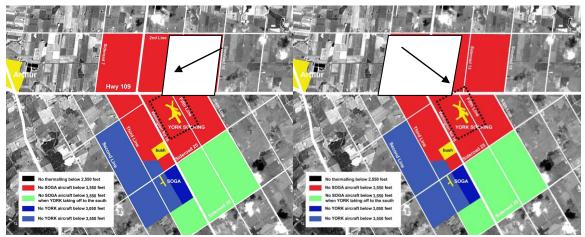
While flying at York, you will be using York's classrooms, washrooms, and kitchen facilities. Please help keep these facilities clean. Work crews will be organized during the week to help tidy up. YSA is a not-for-profit organization with no paid employees, so all members and guest members are expected to help out in club chores.

We hope that having read this letter, you have a better understanding of our expectations during your check flights and that you will take the opportunity before arriving to familiarize yourself with our runways and checks lists. You will be tested on the content of this letter upon arrival prior to any flights so please study it closely.

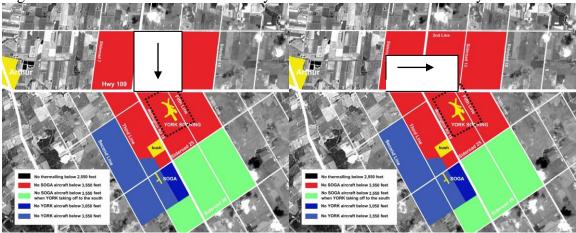
Sincerely

Eva Dillon Chief Flying Instructor York Soaring Association

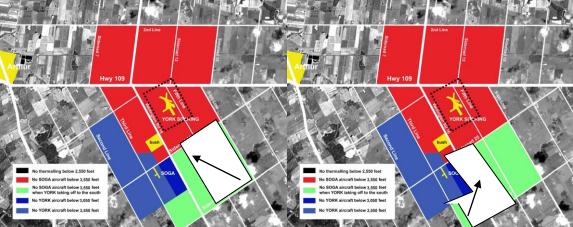
APPENDIX A: Example practice areas based on wind direction



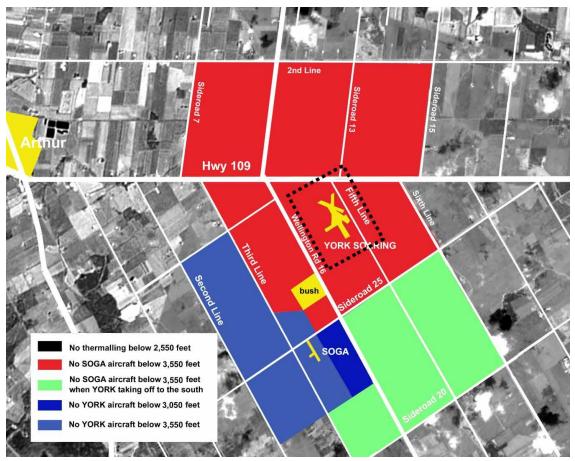
Left Above: Wind from North East stay north of 109 and East of runways Right Above: Wind from North West stay north of 109 and west of runways



Left Above: Wind from North stay north of 109 and within 1 side road of runways Right Above: Wind from West stay west of runways and less far north than usual



Left Above: Wind from South East stay between side road 20 & 25 and west of 6<sup>th</sup> line Right Above: Wind from South West stay west of 5<sup>th</sup> line between side road 20 & 25 (avoid SOGA)



Detailed map of airspace directly around York Soaring.

## 8 simple rules for flying at York:

- Fly upwind in 2-33 and 1-26
- Land long on the active
- Immediately exit and rotate your glider after landing
- Transport gliders directly across field
- Land short of the intersection when landing on alternate runways
- Be ready for your turn to launch and launch gliders quickly
- Assist with flight line duties (launches, retrievals, flight time recording) when not flying
- No unauthorized aerobatics